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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/032,816 | 12/26/2001 | Masateru Minemoto | 056314/0004 | 6945 |
| 31013 | 7590 | 12/02/2004 | EXAMINER | |
| KRAMER LEVIN NAFTALIS & FRANKEL LLP INTELLECTUAL PROPERTY DEPARTMENT 919 THIRD AVENUE NEW YORK, NY 10022 | | | ROCHE, TRENTON J | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2124 | |

DATE MAILED: 12/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | | |
|------------------------------|------------------------|--|---------------------|--|
| Office Action Summary | Application No. | | Applicant(s) | |
| | 10/032,816 | | MINEMOTO, MASATERU | |
| | Examiner | | Art Unit | |
| | Trent J Roche | | 2124 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 December 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,6,7 and 9-11 is/are rejected.
- 7) ☒ Claim(s) 4,5 and 8 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

1. This office action is responsive to communications filed 26 December 2001.
2. Claims 1-11 have been examined.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1, 2 and 6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. Regarding claims 1 and 2, the phrase "such as" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d). As such, for purposes of examination, the claim will be interpreted to read "for creating a multi-dimensional horizontally written flowchart." and "drafting the multi-dimensional, horizontally written flowchart based on the edited multi-dimensional flowchart."

6. Regarding claim 6, the phrase "and the like" renders the claim(s) indefinite because the claim(s) include(s) elements not actually disclosed (those encompassed by "and the like"), thereby rendering the scope of the claim(s) unascertainable.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 1-3 and 9-11 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent 6,628,312 to Rao et al, hereafter referred to as Rao.

Per claim 1:

Rao discloses:

- a multi-dimensional programming device comprising an object file unit storing object information for creating a multi-dimensional, horizontally written flowchart (“the visualization tool stores and retrieves data for visualization using an abstract data model, such as a multidimensional data cube” in col. 4 lines 20-22)
- an object editing unit for using the object information read from said object file to edit the multi-dimensional flowchart (“detecting a user’s interaction with the data represented in the visual model; initiating an operation on the data set based on the detected user interaction with the data” in col. 2 lines 48-50)
- a drafting unit for drafting the edited multi-dimensional flowchart (“updating the visual model to reflect the operation initiated by the user” in col. 2 lines 51-52)
- a saving unit for saving the edited multi-dimensional flowchart into said object file unit (“The user invokes operations on the abstract data model by operating on the visual model” in col. 8 lines 24-25. The operations on the visual model are reflected by saving the changes in the abstract data model.)

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substantially as claimed.

Per claim 2:

Rao discloses:

- a multi-dimensional programming device comprising reading object information from an object file unit storing object information for creating a multi-dimensional, horizontally written flowchart (“the visualization tool stores and retrieves data for visualization using an abstract data model, such as a multidimensional data cube” in col. 4 lines 20-22)
- using the object information to edit the multi-dimensional flowchart (“detecting a user’s interaction with the data represented in the visual model; initiating an operation on the data set based on the detected user interaction with the data” in col. 2 lines 48-50)
- drafting the multi-dimensional, horizontally written flowchart based on the edited multi-dimensional flowchart (“updating the visual model to reflect the operation initiated by the user” in col. 2 lines 51-52)
- saving the edited multi-dimensional flowchart into said object file unit (“The user invokes operations on the abstract data model by operating on the visual model” in col. 8 lines 24-25.

The operations on the visual model are reflected by saving the changes in the abstract data model.)

substantially as claimed.

Per claim 3:

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The rejection of claim 1 is incorporated, and further, Rao discloses a start and end terminator, coordinate information, and cell information as claimed (Note Figure 12 and the corresponding sections of the disclosure)

Per claim 9:

The rejection of claim 3 is incorporated, and further, Rao discloses a function for shrinking or restoring the coordination information by units of rows and columns as claimed (Note section 1.

The Select-Slice Operation and section 2. The Promote/Demote operations in col. 9 line 31 to col. 10 line 47.)

Per claim 10:

The rejection of claim 3 is incorporated, and further, Rao discloses a function for burying a given coordinate axis into another coordinate axis, such as by decreasing the number of dimensions centered around the time axis which is common throughout the programming space as claimed

(Note section 1. The Select-Slice Operation and section 2. The Promote/Demote operations in col. 9 line 31 to col. 10 line 47.)

Per claim 11:

The rejection of claim 1 is incorporated, and further, Rao discloses horizontal slit information as claimed (Note Figure 7 and the corresponding sections of the disclosure.)

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Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,628,312 to Rao et al, hereafter referred to as Rao.

Per claim 6:

The rejection of claim 1 is incorporated, and further, Rao discloses making the programming space displayable on the screen by means of three-dimensional basic coordinates, and performing the editing of said screen according to an input command signal as claimed ("the dimension hierarchy for a three-dimensional data set..." in col. 7 lines 31-32). Rao does not explicitly disclose that the horizontal axis is the time axis and the vertical axis being at least the data axis and the control axis. However, the concepts of modeling as disclosed by Rao are intended to indicate a way to display multidimensional data, and that the data dimensions disclosed by Rao are but one instance of the data that may be represented. As time, data and control are measurements of data which are widely well known to one of ordinary skill, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the multidimensional visualization system of Rao to include dimensions for tracking time, data and control so that one may visualize those aspects of the system according to the model disclosed by Rao.

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Per claim 7:

The rejection of claim 6 is incorporated, and further, Rao discloses switching a dimension in order to take a cross section as claimed (Note section 1. The Select-Slice Operation and section 2. The Promote/Demote operations in col. 9 line 31 to col. 10 line 47.)

Allowable Subject Matter

11. Claims 4, 5 and 8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Trent J Roche whose telephone number is (571)272-3733. The examiner can normally be reached on Monday - Friday, 9:00 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kakali Chaki can be reached on (571)272-3719. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Trent J Roche

Examiner

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TJR


KAKALI CHAKI
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100